



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,917	09/13/2000	Matthias Wendt	PHD 99,182	7454

7590

09/25/2002

Corporate Patent Counsel
U. S. Philips Corporation
580 White Plains Road
Tarrytown, NY 10591

EXAMINER

BETTENDORF, JUSTIN P

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,917

Applicant(s)

WENDT ET AL. *me*

Examiner

Justin P. Bettendorf

Art Unit

2817

-- Th MAILING DATE of this communication app ars on the cover sh et with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 2, references are made to claims by claim no., which is not proper format because the claims and claim numbers may change. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 7 recites the limitation "the core" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 4, 9, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Dielacher et al. (of record).

The Dielacher et al. reference figure shows a network coupler that includes: a center-tapped primary coil 5a which forms two primary coils with the center tap being connected to

Art Unit: 2817

voltage source, i.e. power supply, 7 (col. 3, lines 36-37) that are both (i.e. both sides of the tap) magnetically coupled to the secondary of the repeater 5 that is connected to differential signal source/receiver 11 (col. 3, lines 41-50). The lines 1 and 2 form the first and second lines. The reference discloses in col. 3, lines 36-37 that the coil 5a is a center-point tapped coil; therefore, the disclosure implies that the coil 5a is made from the same material with the same cross-sectional area (with respect to claim 4). Accordingly, (with respect to claim 11) the first and second primary coils that form coil 5a inherently have the same impedance and coil resistance (because of the center tap) and, therefore, the current flowing through each of these coils from the supply point of the center tap into lines 1 and 2 is inherently the same. With respect to claim 10, the recitation of the use of the device in a vehicle is met by this reference because it is fully capable of being used in a vehicle (see MPEP 2112) as the disclosure shows a structural similarity to the claimed invention and is disclosed as transmitting differential data.

Claim Rejections - 35 USC § 103

7. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dielacher et al.

As noted above, the Dielacher et al. reference discloses a center-tapped primary coil 5a that forms two primary coils and a secondary coil that is shown magnetically coupled through a core in the transformer device 5 (i.e. the core is shown schematically by the line between the windings). However, the reference is silent on the details of the windings/coils such as strips led cross-wise (claim 7), printed circuit windings (claim 8), and the number of windings (claims 5 and 6).

Art Unit: 2817

Nevertheless, cross-wise strips and printed circuit windings are conventional for reducing the overall height of the device (i.e. miniaturization).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have substituted either well-known cross-wise conductor strips or printed circuit windings in place of the generic windings in the device of Dielacher et al. because, as the reference is silent on the exact structure of the windings, any art-recognized equivalent windings would have been usable therewith such as the well known conductor strips or printed circuit windings.

Additionally, the number of windings (i.e. turns ratio) is based on the desired current/voltage on the lines. Accordingly, it would have been obvious to have formed the number of turns of the primary coils 5a (i.e. the two windings on either side of the center tap) less than the secondary (e.g. 1 turn) connected to device 11 because such a modification would have been merely based on the desired current/voltage supplied lines 1 and 2 and the device 11.

Response to Arguments

8. Applicant's arguments with respect to claims 1 and 4-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

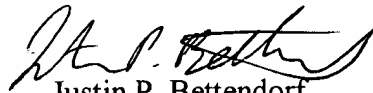
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grandmont et al. United States Patent No. 5,781,093 discloses a PCB transformer.

Art Unit: 2817

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin P. Bettendorf whose telephone number is (703) 308-2780. The examiner can normally be reached on 6:00-3:30 (M-F, 1st Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Justin P. Bettendorf
Primary Examiner
Art Unit 2817

jpb
September 23, 2002